

ABSTRACT

In a telecommunications network comprised of wireline and wireless subscribers, automated directory assistance is provided through a plurality of directory assistance voice peripherals. Such directory assistance voice peripherals are able to query the subscriber requesting assistance in response to a dialed 411 or other directory assistance request. A subscriber request is sent from the local or tandem switch (SSP or WIN MSC) to an intelligent service control point (SCP) which directs control of the request, queries the line information database, routes the request to a directory assistance voice peripheral and the directory assistance voice peripheral notifies the directory assistance controller. The assigned directory assistance voice peripheral interacts with the subscriber to determine the query. The query is satisfied by the directory assistance controller through the directory assistance database. Once the query is answered the call is released by the SCP and routed to the end-office servicing the newly called number.

If the directory assistance controller is unable to find the results requested, then the call is routed to the OSS using a called number that enables correlation. The OSS sends a message to the SCP, the SCP retrieves the called number from the message and correlates the received message with the active call context. The SCP requests the OSS to place the caller on hold, obtains a different correlation ID and routing number from the directory assistance voice peripheral, requests the OSS to connect the directory assistance voice peripheral to the call, requests the OSS to attach an operator, provides context information (e.g., city, state, and listing) to the operator, and requests the DA_VP to play the end user's utterance to the operator. The directory assistance voice peripheral complies and releases. The SCP then either releases or waits for the results from the operator. In the scenario in which the SCP waits for results from the operator, the operator obtains the results of the request and releases the call. The OSS provides the SCP with the results. The SCP then requests the AIN SSP to route the call to the end office serving the called number and generates the OS AMA records.

For some call types, the directory assistance service may be invoked from the OSS. In this case, the OSS sends a request for instructions to the SCP and the SCP connects the subscriber to the directory assistance voice peripheral via the PSTN and without using dedicated voice links between the OSS and directory assistance voice peripheral. The directory assistance voice peripheral notifies the directory assistance controller. The assigned directory assistance voice peripheral interacts with the subscriber to determine the query. The query is satisfied by the directory assistance controller through the directory assistance database. Once the query is answered, the call is released by the SCP and routed by the OSS to the end-office servicing the newly called number.